DOCUMENT RESUME

ED 411 882 JC 970 466

AUTHOR	Leong, Yip Kai
TITLE	Lifelong Learning and Vision 2020 in Malaysia.
PUB DATE	1997-00-00
NOTE	13p.; In: Lifelong Learning: Policies, Practices, and Programs; see JC 970 458.
PUB TYPE	Information Analyses (070) -- Opinion Papers (120)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Economic Development; Educational Change; Educational Improvement; *Educational Philosophy; *Educational Policy; Elementary Secondary Education; Foreign Countries; Futures (of Society); Human Resources; *Labor Force Development; Lifelong Learning; National Programs; Postsecondary Education; Role of Education
IDENTIFIERS	*Malaysia

ABSTRACT

The Malaysian government has adopted the creation of a fully developed economy by the year 2020 as a principal goal, emphasizing that the development should be economic, political, social, spiritual, psychological, and cultural. In order to develop the necessary human resource base to reach this goal, the country must strengthen the teaching of mathematics, science, and English in its higher education system, establish entrepreneurial and management development programs, and train its workforce with the latest industrial processes. Education in Malaysia is, in fact, changing very rapidly, responding to the emerging focus on lifelong learning; the growing emphasis on learning, as opposed to teaching; and the development of new delivery systems. With respect to elementary and secondary education, the country has shifted its focus on the provision of basic education for all to the provision of quality education for all in the 21st century, developing new principles and integrating education at all levels of schooling. Changes are also being made in the nation's higher education and training systems, such as 1996 legislation that permits the establishment of private universities and branch campuses of foreign universities and efforts to provide financial assistance to students. Finally, in the non-formal educational sector, there is an increased emphasis on human resource updating and meeting individual and business needs for job advancement and higher wages. (BCY)

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Lifelong Learning and Vision 2020 in Malaysia

Yip Kai Leong

In: Lifelong Learning: Policies, Practices, and Programs

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Lifelong Learning and Vision 2020 in Malaysia

by Yip Kai Leong

Most APEC economies share a common goal: namely, how to ensure their educational systems are relevant in times of rapid economic and social change. This challenge has become a preoccupation and a major challenge within Malaysia, in large measure because of its importance in relationship to achieving Vision 2020, the national development plan which has as its focus the creation of a fully developed economy by the year 2020. This paper describes global change and the need for human resource development in Malaysia, the changing nature of education, formal education at the primary and secondary school levels within Malaysia, changes taking place in higher education within Malaysia, and non-formal education in Malaysia. Within this overview, the paper critically analyses various policies and strategies taken by the Malaysian government in what can only be described as a major restructuring of the education system. The paper then argues that the logical extension for these changes is the development of a fully integrated lifelong learning system.

MALAYSIA, CHANGE AND HUMAN RESOURCE DEVELOPMENT

The Government of Malaysia has adopted, as a principal goal, the creation of a fully "developed" economy by the year 2020 (Ahmad Sarji Abdul Hamid, 1993, pp. xiii-xxi). However, the Malaysian model of a developed economy will be different from other developed economies as they exist in the world today. In his paper titled *Malaysia: The Way Forward*, presented to the Malaysian Business Council, Prime Minister Mahathir Mohamad (1992, p. 196) described the development model for Malaysia as follows:

> *Without being a duplicate of any of them, we can still be developed. We would be a developed country in our own mould. Malaysia should not be developed only in the economic sense. It must be a nation that is fully developed along all dimensions: economically, politically, socially, spiritually, psychologically and culturally. By the year 2020, Malaysia can be a united nation, with a confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous and in full possession of an economy that is competitive, dynamic, robust and resilient.*

In the effort to achieve developed country status, one of the strategies undertaken by the government involves the development of the country's most important asset — its human resource base. In order to face the challenges of the twenty-first century, new skills and fresh knowledge, coupled with exemplary attitudes, must be learned and re-learned on an ongoing basis throughout life. This learning will take place both inside and outside the formal education system, and the resulting quality and resourcefulness of the workforce will directly determine the degree to which Malaysia is successful with regard to achieving its economic development goals. In effect, it is understood within Malaysia that the professional workforce will play the pivotal role in so far as demarcating Malaysia's competitive edge with respect to other nations.

Malaysia's economy has been quite literally transformed within the last decade, moving rapidly away from a low-technology, commodity-based environment to one where manufacturing and the services sectors are employing higher and more sophisticated technology. Malaysia must compete through continuous productivity improvements, more value added operations, and enhanced product quality. The competitive advantage associated with cheap and abundant labour will continue to be eroded with the advent of low cost producers. Clearly, education is a critical component of any competitive workforce strategy.

Rapid industrialisation, coupled with a shift towards more capital intensive production, has changed human resources development in Malaysia. Currently, the country is facing a shortage of trained manpower, particularly in the fields of engineering and management. The government, though concerned about rapid industrialisation and concomitant needs, recognizes that the required foundation in science and technology to support this development has yet to be acquired. Foreign expertise is still very much needed for development, as are an array of human resource development policies and programs which will continuously upgrade and improve the education and training system. In this context, there are three important dimensions.

First, there needs to be a stronger focus on strengthening the higher education system as it pertains to the teaching of science and mathematics and the English language, as well as to the broad expansion of vocational and technical education so necessary to cope with developing knowledge and skills requirements. Second, Malaysia needs to master state-of-the-art management techniques and systems through entrepreneurial and management development programs. Third, Malaysia needs to equip its workforce with training in the latest technological and industrial processes. Within this framework, retraining and skills upgrading of the present workforce must be a priority. These three dimensions, when implemented in an integrated fashion, will support the strategies and programs designed to dovetail with the objectives of Vision 2020 (Ahmad Sarji Abdul Hamid, 1993).

One significant measure that has been introduced by the government to increase the supply of skilled workers is the establishment of the Human Resources Development Fund under the "Human Resources Development Act 1992". This fund encourages and facilitates employers in the manufacturing and service sector to increase the pace of retraining and skills upgrading in their workforce, as well as to

equip employees with specialised and up-to-date skills as manufacturing processes become increasingly automated and more complex. Recognising the need for large initial outlays in technical human resource development and skills training as well as optimising the utilisation of training facilities in the public sector training institutions, the Ministry of Human Resources and the Ministry of Education have implemented the concept of time-sector privatisation for retraining and skills upgrading.

Malaysia is a developing country with a per capita income of RM9,786 (US$3,914) in 1995 (Economic Planning Unit, 1996, p. 5). The government is aggressively implementing development programs for the eradication of privation, and the incidence of poverty among Malaysians fell from 17% in 1990 to 9% in 1995 (figures rounded to the nearest whole number) (Economic Planning Unit, 1996, p. 71). Many basic needs, including housing, health and education, continue to be addressed by government; however, at the same time, foreign investment and privatisation have created many jobs and considerable wealth. In this environment, the objective for most adults participating in non-formal learning activities is to earn more money through promotion or a job change. This clearly takes precedence over learning for personal development or recreational purposes.

THE CHANGING NATURE OF EDUCATION

The evolution of the world into a global village has gone beyond mere rhetoric. We know that borders are disappearing and the information age is changing the way we work, play and interact with each other. A significant development in one part of the world has an almost instantaneous effect everywhere. The spread of ideas, ideologies, cultures and technologies has no confines in our borderless world, and there is every indication that life in the twenty-first century will be accompanied by an accelerated rate of change. With advances in the fields of science and technology, and the explosive growth in information, we are constantly being reminded that our knowledge and skills, often just acquired, are quickly obsolete. These developments greatly affect human life, and the ability to cope with change has become paramount.

Knowles (1980) identified four forces which he felt are ongoing influencers of effective educational practices. The first of these pertains to the purpose of education. Traditional perspectives argue that the purpose of education, at its most simplistic level, is to produce an educated person. In this context, education is limited in the sense that it has an end. However, in the current era, one marked by an explosion of knowledge, revolution in technology, and social policies that argue for equality of educational opportunity, this traditional purpose of education and the belief in the power of a fixed knowledge set are no longer appropriate. Now, the educational mission is to produce a workforce of competent people who are able to apply knowledge under changing conditions and, more importantly, who are able to continue learning on their own.

The second force is the shift from a focus on teaching to a focus on learning. In the past, emphasis was placed, often with great deliberation and in great detail, on training teachers to be the centre for information and control. The teachers taught and the students learned; if there was no teaching, there was no learning. Now, the

focus is on the learning side and emphasis is placed on the students. In this model, learning is student driven, not teacher controlled.

The third force is the concept of lifelong learning as the organising principle for all education, the reason being that, in a world of accelerating change, learning must be a lifelong process, one that extends throughout the lifespan. Formal elementary and secondary schooling, therefore, must be concerned primarily with the development of the skills of inquiry, and adult education must be concerned primarily with the provision of resources and support for self-directed learning.

The fourth force relates to the development of new delivery systems for learning. These enable individuals to continue learning throughout their lives, at a time and place of their own choosing. Flexibility is the key. These new delivery systems include examples and characteristics which have been variously labeled as "non traditional study", "external degrees", "multimedia learning systems", "community education", "learning communities", "learning resource centres", and "learning networks". Thankfully, education is no longer a monopoly business housed within educational institutions and framed by teacher-centred offerings. Resources for learning are everywhere, and the task of learning organizations is to link learners with learning resources.

Education in Malaysia is changing quite rapidly, as described later in this paper, and the forces described by Knowles are alive and well within the country.

FORMAL EDUCATION — ELEMENTARY AND SECONDARY SCHOOL FOCUS

The provision of "basic education for all" has long been a goal of the Government of Malaysia, and various strategies have been implemented during the past several decades in pursuit of this. Results suggest that this goal has become a reality, and emphasis has shifted from "basic education for all" to a new vision — "quality education for all in the twenty-first century". Malaysia subscribes to the concept of "education for life", that is, the notion that education is not an end in itself, but rather its purpose i. to serve life. As our lives undergo change, education must change to be in concert with this. In the past, when Malaysia advocated education for all, emphasis was placed on the basics — reading, writing and arithmetic. It was thought that this approach to learning and education would fulfil the basic needs of life as it was then experienced. Now, as Malaysia prepares for an era of constant and accelerated change, it is clear that basic education alone will not equip people for the challenges and opportunities in the twenty-first century.

By advocating "quality education for all" in the formal school system, it is necessary to include more than basic reading, writing and numeracy skills. There is a need to emphasize the development of critical thinking skills. Life in the twenty-first century promises to be filled with the need for continuous adjustment and development, and change will be unpredictable with few discernible patterns. Therefore, education must prepare learners to cope with change, rather than depend on habitual responses. In effect, education for the future should place less emphasis on acquiring knowledge, which is transient, and focus instead on developing critical thinking skills, which will allow learners to process and respond to change, and

even embrace and look forward to it, rather than resist or oppose it.

"Quality education for all" also means we must place greater emphasis on nurturing broad human development than has occurred in the past. In our pursuit of progress and economic advancement, people are increasingly driven by materialistic values. However, high per capita incomes are not necessarily an indicator of the standard of happiness and contentment among people. Quality education needs to address value issues and help people seek satisfaction and balance in their lives.

Also important in this revitalized framework is the need to develop among students an appreciation for and understanding of the rest of the world, including other cultures and value systems. The global village requires peaceful and even respectful co-existence. "Quality education for all" should produce a common curriculum which cultivates in children a sense of trust and love for others. This strong international component in the educational system is required in order to diminish hostility and distrust, while instilling positive thoughts for peace, love and harmony.

Progress has been made in so far as implementing the concept and goals of "quality education for all", and, as a first step, a philosophy in tune with quality education has been developed, including the following mission statement (Wan Mohd. Zahid, 1994, p. xvi).

> *Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on an affirmed belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable, who possess high moral standards, and who are responsible and capable of achieving a high level of personal well-being as well as being able to contribute to the betterment of the society and the nation at large.*

A second step, currently underway, involves the development and acceptance of a clear statement of principles, in the form of a national education policy, to guide thinking with regard to the design of educational programing. This national policy should be pragmatic and useful, not merely decorative. It must form the basis for each and every educational activity and program. All educators, both formal and non-formal, and elementary-focused through higher education, must be committed to the policy and be prepared to translate the goals into actual educational activities. It is important that Malaysians be consciously aware of the fact that education does not occur just in schools, but also in many other formal and non-formal environments.

A third element related to the goal of "quality education for all" in the twenty-first century is the emphasis on integrated education for all levels of schooling. Central to this is the development of a well-rounded individual with physical, intellectual, spiritual and social competencies and qualities. An integrated approach refuses to compartmentalise learning, instead it develops learners through a consolidated approach. An integrated education presumes children study the natural sciences in

order to relate to their environment, that they study human sciences so as to forge meaningful relationships with other fellow human beings, and that they study religious sciences and the associated values in order to develop strong moral principles.

In the past, formal education has focused primarily on intellectual development, with little or no emphasis on the aesthetic and moral development of the learners. The Government of Malaysia has now started to emphasise values education as well as religious education as a means to prepare young learners for the challenges of the twenty-first century. The government is committed to a vision of a society that has, at its core, a deep sense of religious consciousness coupled with the highest standards of ethical and moral values, and where the people are industrious, dynamic and dedicated towards advancement and progress.

HIGHER EDUCATION AND TRAINING IN MALAYSIA

Institutions of higher education play a critical role in the development of human resources. In a very general sense they provide opportunities for the academically gifted to study at high levels and advance the world's storehouse of knowledge. At a more pragmatic level, they produce professionals who help meet national human resource needs and requirements. They also act as a home for research facilities and consultancy services. Institutions of higher education include universities, colleges and polytechnics. It has been recognized that there is a need to make radical changes in the system of higher education within Malaysia in order to meet future challenges. In this context, Najib Tun Razak, the Malaysian Education Minister, made the following remarks in his opening speech to the first regional Conference on Higher Education For The 21st Century (Sahibudllah & James, 1996), organised by the Southeast Asia Ministers of Education Organisation (SEAMEO).

> *[Institutions of higher education] must be willing to adopt or adapt new and revolutionary ideas, strategies, concepts and tools from whatever disciplines to enable them to effect the radical changes or make the quantum leap. To enable us to achieve dramatic improvements to our standard of education, we need to carry out a re-engineering, a fundamental re-thinking and a radical redesigning of our existing educational processes. This should include re-thinking existing structures, procedures and entrenched norms, notions and practices pertaining to education. For this to be possible, it is equally vital for ASEAN countries to re-examine the issue of institutional governance including the distribution of power, authority and influence within the institutions of higher learning and the flexibility to devise new mechanisms for academic and general management. In this context, we need to re-examine the whole question of financing of public universities. So long as they are partially or wholly financed by governments, there is little urgency for them to improve the element of financial accountability.*

Radical changes have been planned for the overhaul of the higher education system in Malaysia. Some have already been implemented, while others are yet to

come. These changes are in keeping with the government's goal of making Malaysia a regional centre for excellence in education.

With a specific view towards liberalising the education sector, five bills related to higher education were passed by the Malaysian Parliament in 1996. These include the "Education Act", the "Universities and University Colleges (Amendment) Act", the "Private Higher Educational Institutions Act", the "National Council of Higher Education Act" and the "National Accreditation Act". The Education Act, among other things, permits the establishment of branch campuses of foreign universities and the creation of private universities in Malaysia. This will be direct competition for the present nine universities which are publicly owned and state financed.

The raison d'être behind the government's move to permit the establishment of foreign and private universities is to reduce the outflow of about RM2.5 billion (US$1 billion) annually for overseas education. Currently, approximately 60,000 Malaysian students study overseas. The private sector has been called upon by the government to develop higher education as an industry, and to turn Malaysia from consumer status to provider status in this regard. Part of this may involve increasing the number of twinning arrangements that Malaysian institutions have with foreign universities where a part of the program can be completed locally and the remainder done overseas.

The creation of foreign campuses in Malaysia could take longer than originally projected, as the government's first priority is to establish universities associated with national utility and resource companies. Included are the proposed Petronas University (oil and gas), the Telekom University (information technology), and the Tenaga Nasional University (power). Petronas, Telekom and Tenaga Nasional are state charted companies with abundant resources and expertise. Private local universities and branches of foreign universities can only be established in Malaysia through an invitation from the Ministry of Education, and the National Accreditation Act has established an Accreditation Board designed to ensure the quality of private local and foreign universities.

The government posits that by having branches of foreign universities, Malaysia will attract students from other parts of the world to study. The goal is cross cultural mixing and understanding. For example, it is thought that students from Britain will complete part of their studies in Malaysia, and Malaysian students will do the same course in Britain. Both groups will learn beyond their disciplines, and cross cultural understanding will result.

Amendments to the University and University Colleges Act have paved the way for the "corporatisation" of public universities in Malaysia. Universities will have greater autonomy to manage and operate their institutions in a more dynamic and proactive manner. They will have greater flexibility to develop their own revenue sources, increase their capacities for consultancy services and the commercialisation of research findings, and recruit and remunerate teaching staff in a more entrepreneurial fashion. These institutions, however, will continue to be guided by overall government policy direction and objectives.

The government is committed to ensuring that higher education institutions will continue to be accessible by lower income groups and the disadvantaged. This will

be championed in part by appropriate financial assistance packages. In the 1997 budget, the government has established an RM100 million (US$40 million) loan fund to assist students who face financial constraints (*Budget Speech*, 1996). And in another move to enhance the higher education environment, the government has stipulated that half of the income received by non-resident lecturers who lecture in approved institutions and organisations in selected disciplines will be exempt from income tax. The government has permitted the entry of foreign lecturers in order to overcome the shortage of experts.

In this overall context of change within higher education, the government has directed state owned universities to expand their existing distance learning and off-campus course initiatives. This is an effort to provide "second chances" for adults who did not acquire degrees through the normal course of study. Entry requirements for these courses have been lowered to enable those who lack the paper qualifications, but who have the necessary experience, to enrol in these programs.

NON-FORMAL EDUCATION IN MALAYSIA

The term non-formal education, as used in this paper, denotes all forms of education provided to adults or children which are not encompassed within the formal system of elementary, secondary and higher education. In the Malaysian context, this has typically included such diverse programing as agricultural extension and farmer training programs, adult literacy programs, further education, occupational skills training, youth organisations which are training-focused, human resource training, workforce upgrading, cooperatives, and various community programs that provide instruction in health, nutrition, and family planning.

Non-formal education has been part of the Malaysian cultural heritage since time immemorial. Long time examples include instruction on martial arts, or the *silat*, and the teaching of Islamic studies through the hut or *pondok* system of education. Unlike the philosophy and implementation of formal education, non-formal education in Malaysia is broad, fragmented and has never been supported, evaluated or considered as a single system.

The general idea behind the efforts of the various forms of non-formal education is to improve the social and personal living and occupational capabilities of the population. There are limits to what can be taught in the formal school system, hence there should be other and continuing efforts to develop the foundations laid by schools. This is particularly so in the case of vocational or occupational training, and in community development such as home economics, nutrition and health for women's groups. In general, the non-formal system provides continuing education to enable learners in the community to acquire new knowledge, skills and attitudes.

Formal education is organised by established institutions, most often highly bureaucratic in nature, which view teaching and education as their primary mission. Non-formal education in the Malaysian context generally incorporates a much more flexible structure and organisation. Also, non-formal education is not controlled by one agency or ministry, as per formal education and the Ministry of Education, but instead falls under the jurisdiction of various agencies. Some of these are government agencies while others are voluntary or private in nature. The teaching and

learning focus is aided, if not supplanted, by a more problem solving approach, and there is a strong emphasis on meeting individuals' social, vocational and recreational needs as well as objectives related to community development projects. Various methods and media are used for non-formal instruction, and programing is delivered in home, at work, in mosques, at clinics, as well as in formal classes or special institutions.

In terms of flexibility, the non-formal system employs variety in the curriculum, total hours of instruction, time at which programing is delivered, place where programing is delivered, age of students, and class sizes. Non-formal education is not, however, without structure. As well, planning and co-ordination of non-formal education, including research on problems and issues related to this sector, are necessary in order to develop and assess non-formal programing.

A study by Nor Azizah Salleh (1991) identified characteristics which contribute positively and strongly to adult learning in the Malaysian context. Many of these, including the following, are employed in the non-formal learning environment:

- a peaceful social-psychological environment facilitates learning;
- there needs to be two-way communication between teachers and learners, and a willingness to share information by both parties;
- learning is a voluntary process, and teachers must be sincere;
- attitudes are difficult to change, and teachers must be patient;
- learners need and demand respect, and teachers need to be diplomatic as they interact with learners;
- language should always be simple and acceptable to the learners;
- teaching must be interesting, and presentations should employ various methods and techniques;
- knowing the background of the participants will help teachers provide illustrations that are familiar to the learners;
- learners should be given opportunities to share their expertise;
- teachers need to socialise within the community;
- teachers need to update their skills to meet learners' needs.

(It is interesting to note these factors appear to apply equally well to both the formal and non-formal educational context, but have only been adopted in the main by the non-formal side.)

At this stage of development the relationship between the formal and non-formal learning systems can be characterized as complementary but not integrated. This will likely change as the need to have a seamless educational system becomes more apparent.

SUMMARY AND CONCLUSION

The quality of life is heavily influenced by education. The more you have, the better things are, at least generally. The more everybody in the society has, the better life becomes for the economy as a whole. In Malaysia, it is clear that economic development, as stated in Vision 2020, is heavily intertwined with the development and re-development of education, for all.

The forces identified by Knowles (1980) — educating people to direct their own learning, focusing on learning not on teaching, incorporating lifelong learning principles, and applying new delivery methods for supporting the learning environment — should be the basis for education in the twenty-first century. Clearly, these principles are fundamental to Malaysia's plan of "quality education for all". Within this new context, elementary and secondary school education is changing under the influence of "quality education for all". The higher education environment in Malaysia is also undergoing rapid change, including increased private sector competition and encouragement for foreign universities to establish branch campuses. The goal is for Malaysia to become a centre for excellence in learning, and to reduce the number of Malaysians studying overseas. Change is also afoot in the non-formal sector. There is increased emphasis on human resource updating, and the prospects for job advancement and higher wages are creating significant demand from companies and individuals. All these changes are, of course, taking place within a Malaysian context, one which emphasizes the whole development of the individual, including the spiritual component.

Most critically and more important than the individual pieces, however, is the notion that as a whole they will create a system, a lifelong learning system. With effort and design, the opportunities will dovetail, programs will link, and learners will be able to take part in a full range of learning opportunities throughout the lifespan at times and in places which meet their needs. Only then, with a lifelong system that integrates the elementary, secondary, higher and non-formal education sectors, will the learning needs associated with Vision 2020 be met.

REFERENCES

Ahmad Sarji Abdul Hamid. (1993). *Malaysia's vision 2020: Understanding the concept, implications and challenges*. Kuala Lumpur: Pelanduk Publications.

Budget Speech. (1996, October 26). *New Straits Times*, p. 15.

Economic Planning Unit. (1996). *Seventh Malaysia plan 1996-2000*. Kuala Lumpur: Author.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Englewood Cliffs, NJ: Cambridge Adult Education.

Mahathir Mohomad. (1992). *Malaysia the rising star: Business and investment opportunities and challenges towards 2020*. Kuala Lumpur: Kuala Lumpur Stock Exchange and Malaysian Strategic Consultancy Company.

Nor Azizah Salleh. (1991). *Adult education activities* (Research Project 42/89). Kuala Lumpur: Universiti Kebangsaan Malaysia, Bangi.

Sahibudllah, M. & James, A. (1996, July 10). Najib: Revamp education system in ASEAN. *New Straits Times*, p. 9.

Wan Mohd. Zahid. (1994). Quality education for all: Direction and challenges in the 21st century. In Anicia Alvarez, Myint Swe Khine and Jim Welsh (Eds.), *Proceedings of the international conference on education for all* (Universiti Brunei Darulsalam) (p. xvi). Brunei: Educational Technology Centre, Universiti Brunei Darulsalam.